

DIVIDEND ANNOUNCEMENT EFFECT ON THE VALUE OF THE FIRM

MBA THESIS

BY

Bülent KARAAĞAÇ

Ankara, December 1997

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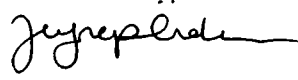
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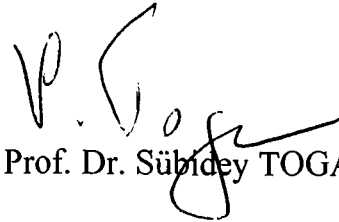
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ABSTRACT

DIVIDEND ANNOUNCEMENT EFFECT

ON THE VALUE OF THE FIRM

BY

BÜLENT KARAAĞAÇ

M. B. A.

SUPERVISOR : AYŞE YÜCE

DECEMBER, 1997

The dividend policy of the firms is very important for the investors. Because dividends contain management's superior information of the firm's recent performance and their assessment of future performance. Therefore, it's expected to observe an increase in share prices associated with public announcement of a dividend increase. Throughout the thesis; I tried to find whether dividend announcements have an effect on stock prices in Istanbul Stock Exchange or not. The results I found are not consistent with the view that dividends have valuable information for the investors. Finally the reasons for these results are presented.

Keywords : Dividend announcement, Signaling Hypothesis, Free cashflow

Hypothesis, Capital gain yield, Dividend yield

ÖZET

TEMETTÜ DUYURULARININ ŞİRKETİN DEĞERİ ÜZERİNDEKİ ETKİSİ

BÜLENT KARAAĞAÇ

YÜKSEK LİSANS TEZİ, İŞLETME FAKÜLTESİ

TEZ DANIŞMANI : DR. AYŞE YÜCE

ARALIK, 1997

Firmaların temettü politikaları yatırımcılar için çok önemlidir. Çünkü temettüler, yönetimin şirketin şu andaki ve gelecekteki performansı ile ilgili bilgiler içermektedir. Bu nedenle temettü artışları duyuruları ile birlikte hisse senetleri fiyatlarında da artış beklenmektedir. Tez boyunca İstanbul Menkul Kıymetler Borsasında temettü duyurularının hisse senedi fiyatları üstünde etkisi olup olmadığını bulmaya çalıştım. Sonuçlar temettülerin yatırımcılar için değerli bilgiler taşıdığına dair görüşlerle uyumlu değildir. Son olarak çıkan sonuçlarla ilgili sebepler sunulmuştur.

Anahtar Kelimeler : Temettü duyuruları, Sinyal hipotezi, Serbest nakit akış hipotezi, sermaye kazancı, temettü kazancı

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I. INTRODUCTION

The purpose of this study is to have an understanding of the dividend announcement effect on the value of the firm. The impact of a firm's dividend policy is an unresolved issue. There are many studies and theories about the dividend policy of the firms.

While determining the dividend amounts, firstly it's thought that firms consider only the last year's dividend and this year's earnings. This model seems to provide a fairly good explanation of how companies decide on the dividend rate, but it's unlikely to be the whole story.

A positive wealth impact results from a dividend policy that communicates valuable information to investors. Dividends generally provide a vehicle for communicating management's superior information concerning their interpretation of the firm's recent performance and their assessment of future performance .

By this valuable information investors try to gain some excess return. Most firms ,that pay dividends exhibit behavior which results in constant dividend payouts, increased their dividend payment amounts only when management is relatively certain that higher dividend payout can be maintained indefinitely. Given this type of management behavior, it is likely that investors will interpret an increase in current dividend payout as a message that management anticipates permanently higher cash flows from investment. We may , therefore,

expect to observe an increase in share prices associated with public announcement of a dividend increase.

If dividend changes are to have an impact on share values, it is necessary that they convey information about future cash flows, but it is not sufficient. Therefore it becomes an empirical question whether or not announcements of dividend changes actually affect the share value.

II. LITERATURE SURVEY

In the literature survey, I will firstly explain Lintner model that simply explains the behavior of corporate dividend policy over time. Secondly, I am going to look at the possibility of clientele and ex-date effects that mainly concerns about a question " Do people in high tax brackets avoid investing in high-dividend companies in order to escape higher income taxes on dividend income? "

Third, I will investigate about the signaling hypothesis that tests whether the information content of dividend increases affects the value of the firm or not.

Finally, I will briefly give the results of the studies that are done about the dividend announcement effect.

A. A DIVIDEND POLICY MODEL

Lintner [1956] conducted interviews with 28 carefully selected companies to investigate their thinking on the determination of dividend policy. He suggested that (1) managers focused on the change in the existing rate of dividend payout, not on the amount of the newly established payout as such; (2) most managements tried to avoid making changes in their dividend rates that might have to be reversed within a year or so; (3) major changes in earnings "out of line" with existing dividend rates were the most important determinants of a company's dividend decisions ; and (4) investment requirements generally had

little effect on modifying the pattern of dividend behavior. So according to these observations most companies had somewhat flexible but nevertheless reasonably well-defined standards. They try to move toward a full adjustment of dividend payout to earnings. Lintner suggests that corporate dividend behavior can be described on the basis of the following equation :

$$\text{Change in dividends} = a_i + c_i (D_{it}^* - D_{i,t-1}) + e_{it}$$

where

c_i = the speed of adjustment to the difference between a target dividend payout and last year's payout

D_{it}^* = the target dividend payout

$D_{i,t-1}$ = last period's dividend payout

a_i, e_{it} = a constant and a normally distributed random error term respectively

B. CLIENTELE EFFECTS AND EX-DATE EFFECTS

The dividend clientele effect was originally suggested by Miller and Modigliani [1961]. Their argument went like this :

' A firm sets a particular dividend payout policy, which then attracts a "clientele" consisting of those investors who like this particular dividend policy. For example some stockholders, such as university endowment funds and retired individuals, prefer current income to future capital gains, so they want the firm payout a higher percentage of its earnings. Other stockholders have no

need for current investment income - they would simply reinvest any dividend income received, after first paying income taxes on it, so they favor a low payout ratio. '

The clientele effect is a possible explanation for management reluctance to alter established payout ratios because such changes might cause current shareholders to incur unwanted transaction costs.

Elton and Gruber [1970] attempted to measure the clientele effects by observing the average price decline when stock goes ex-dividend. They discovered that the average price decline as a percentage of dividend paid was %77.7. They continued by arguing that : " the lower a firm's dividend yield the smaller the percentage of his total return that a stockholder expects to receive in the form of dividends and the larger the percentage he expects to receive in the form of capital gains. Therefore, investors who held stocks which have high dividend yields should be in low tax brackets relative to stockholders who hold stocks with low dividend yield " As a result Elton and Gruber concluded that the evidence suggests that M&M were right in hypothesizing a clientele effect.

Pettit [1977] has tested for dividend clientele effects by examining the portfolio positions of approximately 914 individual accounts. He argued that stocks with low dividend yields will be preferred by investors with high income, by younger investors, by investors whose ordinary and capital gains tax rates differ substantially, and by investors whose portfolios have high systematic risk. The evidence suggested that there is a clientele effect . However, the study in

no way suggested that the market price of a security is determined by the firm's dividend policy .

Another study by Lewellen, Stanley, Lease and Schlarbaum [1978] was drawn from the same database as the Pettit study but reached different conclusions. They suggested only a very weak dividend clientele effect.

Eades, Hess and Kim [1984] examined the excess rate of return for equally weighted ex-date portfolios in the period of 1962-1980. They found that abnormal returns are not uniquely associated with the ex-day. No good explanation for this result has yet been proposed. Also they found significant positive returns for stock splits and stock dividends and significant negative returns for nontaxable cash dividends.

C. SIGNALING HYPOTHESIS

If investors expect a company's dividend to increase by 5 percent per year, and if the dividend is in fact increased by 5 percent, then the stock price generally will not change significantly on the day the dividend increase is announced. In Wall Street parlance, such a dividend increase would be "discounted" or anticipated, by the market. However, if investors expect a 5 percent increase, but the company actually increases the dividend by 25 percent, this would generally be accompanied by an increase in the price of stock. Conversely, a less than expected dividend increase or a reduction would generally result in a price decline.

According to Miller and Modigliani (1961) , a larger than expected increase is taken by investors as a "signal" that the firm's management forecasts improved future earnings, whereas a dividend reduction signals a forecast of poor earnings. Thus, M&M claimed that investor's reactions to the change in dividend payments do not show that investors prefer dividends to retained earnings; rather, the stock price changes simply indicate that important information is contained in dividend announcements. This theory is referred to as the **information content, or signaling, hypothesis.**

D. DIVIDEND ANNOUNCEMENT EFFECT

The first study to examine this issue was the stock split study of Fama, Fisher, Jensen and Roll [1969]. They found that when splits were accompanied by dividend announcements there was an increase in adjusted share prices for the group which announced dividend increases and a decline in share prices for the dividend decrease group.

Another study of the effect of unexpected dividend changes on share prices has been made by Pettit [1972] . Pettit used both monthly and daily data to investigate the abnormal performance of 135 firms. He found that most of the price adjustment takes place very quickly either on the dividend announcement date or the following day. Furthermore price changes appeared to be very significant. This leaded Pettit to conclude that substantial information is conveyed by the announcement of dividend changes. Also the results of his

investigation clearly supported the proposition that the market makes use of announcements of changes in dividend payments in assessing the value of a security. In other words, the market reacts very dramatically to these announcements when dividends are reduced or when a substantial increase takes place. The effect of a more moderate dividend increase is proportionately less than of substantial dividend increases. Also the results implied that a dividend announcement may convey significantly more information than the information implicit in an earnings announcement.

Most of the information implicit in the announcement was reflected in the securities' prices as of the end of the announcement period. This lent support to the proposition that the market is reasonably efficient on both monthly and daily basis. The rather large anticipation effect evident in the monthly data could be the result of either the use of insider information (an inefficient market) or the results of announcements related to the dividend change (an efficient market). The small anticipation effect in the daily data, however, implied that the use of insider information is not a major factor affecting short returns.

Watts [1973] found a positive dividend announcement effect but concluded that the information content is of no economic significance because it would not enable a trader with monopolistic access to the information to earn abnormal returns after transaction costs. Watts proceeded in two stages. First, he developed a model to predict dividend changes. It is the same model that Fama and Babiak [1968] found to provide the best prediction of next period's

dividends. Then the abnormal performance index for a security is computed as the product of its one-month abnormal returns. He looked at the abnormal performance index for 24 months averaged across 310 firms. The performance of firms with dividend increases was better than that of firms with dividend decreases, but the greatest difference between the two samples in the 6 months around the dividend change is only %0.7 in the month of dividend. This was a trivial difference.

Pettit's (1972) results have been criticized because he used the observed dividend changes rather than the unexpected dividend changes. Kwan [1981] has improved on Pettit's design by forming portfolios based on unexpected dividend changes, and he finds statistically significant abnormal returns when firms announce unexpectedly large dividend changes.

A study by Aharony and Swary [1980] separated the information content of quarterly earnings reports from that of unexpected quarterly dividend changes. They examined only those quarterly dividend and earnings announcements made public on different dates within any given quarter. Their findings strongly supported the hypothesis that changes in quarterly cash dividends provide useful information beyond that provided by corresponding quarterly earnings numbers.

Woolridge [1983] studied the effect of dividend announcements on nonconvertible bonds and nonconvertible preferred stock in an attempt to separate expropriation effects from announcement effects. If dividend payouts to

shareholders were viewed as payments of collateralizable assets then debt holders and preferred shareholders would view dividend increases as bad news and the market value of their claims on the firm would fall upon the announcement of dividend increases. On the other hand, if dividend increases were signals about higher future cashflows, then bondholders and preferred stockholders should feel more secure and the market value of their claims should increase. Woolridge's empirical results supported the signaling hypothesis. At the announcement date abnormal returns were positive given unexpected dividend increases and negative given unexpected dividend decreases.

Asquith and Mullins [1983] studied the effect on shareholder wealth of the initial dividend announcement - the firm's first dividend . This study found large, statistically significant two-day announcement abnormal returns for initial dividend announcements, 3.7% to 4%. In addition, they studied trading volume around the announcement date, and between the announcement and ex-dates. Unusual trading volume may be an evidence of clientele changes induced when high tax bracket shareholders sell out to low tax bracket investors when the higher dividend payout is announced. They found statistically significant abnormal volume increases during the announcement week that are related to the information content of dividends. There was only weak evidence for higher volume following the announcement date and hence only weak support for clientele adjustments.

Brickley [1983] studied the announcement effect of specially designated dividends - those labeled by management as "extra", "special" or "year-end" and compares them surrounding regular dividend increases. Specially designated dividends were interesting because they were not intended to be a part of continuing higher dividend payout and may therefore not be interpreted by the market as a signal about higher cashflows. Brickley's results supported the opposite conclusion - namely that the market did react positively to the information content of specially designated dividends but that dollar-for-dollar regular dividends convey more information.

Lang and Litzenberger [1989] found some support for the free cash flow hypothesis, namely that " dividend changes for overinvesting firms signal information about investment policies". Their evidence, however, was also consistent to some extent with the "informational content of dividends" hypothesis.

Bajaj and Vijh [1990] provided evidence that anticipated dividend yield affects the price reactions to dividend announcements in a manner consistent with the dividend-clientele hypothesis. Again their evidence did not exclude the dividend informational content hypothesis.

Aharony and Dotan [1994] provided additional empirical evidence pertaining to the issue of whether quarterly cash dividend announcements convey useful information about a firm's future profitability. Their results, based on a large sample of regular quarterly cash dividend changes, indicated that

firms that increased (decreased) their dividends realized, on average, greater (smaller) unexpected accounting earnings in subsequent periods than firms that did not change their dividends.

In sum the evidence in support of the informational content of dividends is overwhelming. Unexpected dividend changes did convey information to the market about expected future cashflows.

E. RELATIONSHIP BETWEEN DIVIDENDS AND VALUE

Friend and Puckett [1964] used cross-section data to test the effect of dividend payout on share value. Prior to their work, most studies had related stock prices to current dividends and retained earnings, and reported that higher dividend payout was associated with higher price-earnings ratios. Friend and Puckett argued that in equilibrium, firms would change their dividend payout until the marginal effect of dividends is equal to the marginal effect of retained earnings. This would provide the optimum effect on their price per share.

Another study done by Black and Scholes [1974] used capital asset pricing theory to control for risk. Their conclusion was quite strong. " It's not possible to demonstrate, using the best empirical methods, that the expected returns on high yield common stock differ from the expected returns on low yield common stocks either before or after taxes.". Their study presented an empirical evidence that the before-tax returns on common stock are unrelated to corporate dividend payout policy. They adjusted for risk by using the CAPM.

Brennan [1970] has shown that if effective capital gains tax rates are lower than effective rates on dividend income, then investors will demand a higher rate of return on securities with higher dividend payout.

Litzenberger and Ramaswamy [1979] also tested the relationship between dividend and security returns. They used the Brennan [1970] model with monthly data for individual securities. Litzenberger and Ramaswamy concluded that risk-adjusted returns are higher for securities with higher dividend yields. The implication was that dividends were undesirable; hence higher returns were necessary to compensate investors in order to induce them to hold high dividend yield stocks.

Litzenberger and Ramaswamy have been criticized by Miller and Scholes [1982] for their handling the information effect of dividend announcements. Of the firms which pay their dividend (i.e., go ex-dividend) in month t , about %30 to %40 also announced the dividend in the same month. When the announcement date and the ex-dividend date occurred in the same month, the monthly return would contain both the information effect and the tax effect (if any).

III. METHODOLOGY

In the study, I chose 124 firms that are listed in ISE. These firms met the following criteria ;

- 1. They are listed in ISE as of the beginning of 1995**
- 2. There are sufficient available data for that year**
- 3. There are no other valuable announcements made by the firm that will affect the value of the stock except dividend announcement.**

The dividend announcement dates and the amount of dividends paid by these companies were then collected for years 1990 -1994 (Table 1 and Table2). So the study period is 5 years. I chose 1990 as the beginning year of my study because before this year, our stock market was very small .

I put all the firms into 3 different categories according to the dividend changes for each year . These categories are :

1. Firms with dividend decreases
2. Firms with dividend increases
3. Firms with constant dividend

For the first two categories the firms are grouped according to the dividend change amount and the percentages are given in Table 4A and 4B.

The study uses daily stock return data to compute excess stockholder

returns and to examine dividend announcements for each firm. To find the return of each stock each day we used the equation :

$$R_{it} = \ln (P_{it} / P_{it-1})$$

where R_{it} : the return on security i during day t

P_{it} : the adjusted closing price of security i on day t

P_{it-1} : the adjusted closing price of security i on day t-1

The daily excess return for a security is estimated by :

$$e_{it} = R_{it} - E(R_{it})$$

where e_{it} : the excess return to security i for day t

R_{it} : the return on security i on day t

$E(R_{it})$: the expected rate of return on security i on day t

$E(R_{it})$ is found by using the equation of $E(R_{it}) = a + bR_{mt}$ where

R_{mt} : the market return during day t

Firstly, I tried to find a and b values by using [-200 days, - 50 days] data of return on each stock and return on ISE index. I used simple regression to find the best estimates of a and b.

The average excess returns on a portfolio of N securities for day t is the

equally-weighted arithmetic average of excess returns :

$$AR_t = 1/N * \sum e_{it}$$

Daily average cumulative excess returns, CAR, are formed by summing the average excess returns over event time where the CAR period is for the period $t = -10$ days until $t = +10$ days.

Hypothesis Testing

For each dividend change category, different hypothesis are tested by the examination of price changes with respect to the return of ISE.

1. H_0 : Firms with dividend increases will not experience significant price increases relative to the market on the announcement date

H_a : Firms with dividend increases will experience significant price increases relative to the market on the announcement date

2. H_0 : Firms with dividend decreases will not experience significant price decreases relative to the market on the announcement date

H_a : Firms with dividend decreases will experience significant price decreases relative to the market on the announcement date

3. H_0 : Firms with constant dividend will experience significant price changes relative to the market on the announcement date

H_a : Firms with constant dividend will experience insignificant price changes relative to the market on the announcement date

Then the significance of the returns is tested by using t-test. For the null hypothesis to be tested that the mean day t abnormal return is equal to zero, I computed t-statistic as :

$$t = AR_t / (S(AR_t) / \sqrt{N})$$

where $S(AR_t)$ is the standard deviation of the average excess return of the sample on day t

To test whether the average cumulative excess return from day t1 until day t2 is significantly positive, I computed the statistical significance of CAR by t-test as :

$$t = CAR / (S(CAR) / \sqrt{N})$$

where $S(CAR)$: the standard deviation of CAR

N : Number of firms in the sample

A dividend announcement date is the date when news of the dividend appears in the ISE daily journal. Neither the ex-dividend day nor the day the dividend paid is considered to be an announcement date. So in this study 2-day excess return is necessary to capture the entire impact of a dividend announcement. Day $t=0$ is the day the news of the dividend is published in the ISE journal. In many cases, however, the news is announced on the previous day, $t = -1$, and reported the next day. If a dividend is announced before the market closes, the market will respond the next day and the announcement day is indeed zero. Thus in reality there is a 2-day announcement "day", $t = -1$ and $t = 0$. So as a result, 2-day average excess return is generated for each dividend announcement examined. This 2-day return is calculated as ;

$$\text{Average of } e_{(-1,0)} = 1/N * \sum e_{i(-1,0)} \text{ for each security}$$

$$\text{where } e_{i(-1,0)} = e_{i-1} + e_{i0}$$

e_{i-1} : the excess return to security i on the day prior to the published dividend announcement in the ISE journal

e_{i0} : the excess return to security i on the day the dividend announcement is published in ISE journal.

Finally a t-statistic is calculated for average of $e_{(-1,0)}$ by ;

$$\text{Average of } e_{(-1,0)} / (S_{e(-1,0)} / \Theta) ,$$

where $S_{e(-1,0)}$: the standard deviation of the 2-day excess returns

Θ : square root of N

N : the number of firms in the sample

I examine these results of each category year by year. Then I also investigate 1990-1993 period wholly to learn the long term trend of dividend announcement effect for each firm. I separated year 1994 from this period and compared this year result with the 1990-1993 period.

In order to understand whether these excess returns exist only for the dividend announcement date or not, I also study the average returns of [-10,0], [-4,0], [-2,0], [0,2], [0,4] and [0,10] around the announcement date for each year.

IV. RESULTS

This section examines how stock prices change with the announcement of dividend payments. In the Appendix part, the average daily excess returns (Table 5A,5B,5C) for the 20-day period surrounding the dividend announcement for the sample I used in each category and the associated t-ratios (Table 6A,6B,6C), are presented for each day. I found that the results don't seem to show any significance at 0.05 significance level.

The 2-day excess return and the associated statistics for each category are given in the appendix part (Table 7A,7B,7C). T-critical for $\alpha = 0.05$ is 1.643 for dividend decrease and increase category and 1.96 for constant dividend category. I check whether t-calculated is greater than t-critical for dividend increase category, t-calculated is less than t-critical for dividend decrease and $-t\text{-critical} < t\text{-calculated} < t\text{-critical}$ for constant dividend category to reject the hypothesis of H_0 .

The statistics for dividend increase category shows that there is an evidence that investors may gain an abnormal return at the announcement date. The opposite is true for dividend decrease. For constant dividend category, it means that the investor will not lose and gain anything at that date.

For dividend decrease category (Table 7A) ; negative returns are obtained in years 1990,1993 and 1994, but only year 1993 result is significant at 0.05 significance level.

For dividend increase category (Table 7B) ; positive returns are obtained in years 1990, 1992 and 1993, but none of the results is significant at 0.05 significance level.

For constant dividend category (Table 7C) , in all years,except 1991, investors obtain positive return.

When we investigate the whole 1990-1993 period; only the result of constant dividend category show significance at 0.05 significance level (Table 8A,8B,8C). For dividend decrease category, a positive average return is found at the dividend announcement date like dividend increase category. But these results are not significant. When I compare them with year 1994, we observe a negative return for both dividend increase and decrease categories although we got positive return for 1990-1993 period . But both of these results are not significant. Also constant dividend category's result is not significant for 1994.

When we examine the firms' behavior for the change in dividends(Table 3), the percentage of the firms that preferred to decrease their dividends is higher than others for year 1990, 1991 and 1992. But for year 1993 and 1994 a higher percentage of the firms preferred to increase their dividends.

For dividend decrease category; as expected,all years except 1991, the percentage of the firms examined that showed a negative market reaction to the announcement of low dividends is higher than the percentage of the firms that are affected positively by the low dividend announcement (Table 3A).

For dividend increase category; only in year 1990 , the percentage of the

firms examined that showed a positive market reaction to the announcement of high dividends is higher than the percentage of the firms that are affected negatively by the high dividend announcement (Table 3B). This was not an expected result.

For constant dividend category; only in 1991, the percentage of the firms examined that showed a negative market reaction to the announcement of constant dividend is higher than the percentage of the firms that are affected positively by the dividend announcement (Table 3C).

As easily seen in these tables, the percentage of the firms that showed a negative reaction to the announcement of dividend change (increase or decrease) is high. This is an interesting result.

When we examine the results in Table 9A, 9B and 9C of Appendix part that shows the CAR for $[-10,0]$, $[-4,0]$, $[-2,0]$, $[0,2]$, $[0,4]$ and $[0,10]$ around the announcement date for each year, we couldn't make a prediction about the general trend of returns. In 1994 all CARs are negative for each range because of the 1994 economic crisis except the constant dividend category. In this category $(-2,2)$ range shows a positive return. In 1993, all CARs are positive after dividend announcement date and negative before that date except again the constant dividend category. In this category all CARs are positive. The opposite is true for 1991 and 1992. Most of the CARs are positive before dividend announcement and negative after the announcement. 1990 results do not give a clue about a trend.

V. CONCLUSION

Results demonstrate that, for the sample I used in my thesis, dividend announcements do not affect the stock prices significantly. The associated t-statistics (Table 7A, 7B, 7C) are not consistent with the view that dividends have unique and valuable information to investors.

Unlike the detailed focus of other announcements, dividends can be used as a simple, comprehensive signal of management's interpretation of the firm's recent performance and its future prospects. So this announcement should be very important for the investor. But in Turkey, the situation is something different. People in Turkey usually consider the capital gain yield when they are choosing the stock they invest. They generally ignore the dividend yield while considering the expected returns of stocks.

Investors in Turkey also are not long term investors. When they gain a significant return, they sell this stock and buy another stock. They usually ignore the possible good future performance of that stock. For this reason the valuable information in the dividend announcement is not used effectively by this type of investors.

The dividend amount of the stocks are insignificant that some investors do not consider getting this money from their investment agencies. For example, the market price of the stock is 20000 TL and the firm announced its dividend as 30% of nominal value which is 1000 TL. This means for an investment of

20.000.000 TL, the investor will get only 300.000 TL. This amount is only 1.5% of the investment. If the dividend percentage increases to 60%, (a 100% increase according to the previous year), this amount is still not significant. When we look at the average 5 year inflation rate (80%), the dividend amounts are not enough to compensate this inflation rate. In this case, although the dividend increase seems to be significant, the investors may not value this dividend.

Because of the low volume in ISE according to world standards, you can easily speculate with one stock by saying something bad or good about that firm. This may increase the price volatility. This situation is seen in our results that there are significant positive and negative returns for other days (Table 6A,6B and 6C) .

Also in Turkey conditions change very fast. And these changing conditions (political and economical) shows its impact on ISE immediately. We saw this huge impact in 1994 crisis very well. Because of this bad effect, firms may increase their dividends in that year but this may not be seen as an increase in stock price. This also may be another explanation for not observing the dividend announcement effect.

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APPENDIX

TABLE 1
DIVIDEND ANNOUNCEMENT DATES

	1990	1991	1992	1993	1994
ADANA A		15/2/91	23/3/92	30/3/93	10/3/94
ADANA C		15/2/91	23/3/92	30/3/93	10/3/94
AFYON CIMENTO		20/3/91	28/5/92	20/4/93	
AKAL TEKSTIL	5/4/90	11/3/91	31/3/92	19/3/93	16/3/94
AKBANK		19/2/91	18/3/92	17/3/93	4/3/94
AKCIMENTO	23/3/90	1/3/91	20/3/92	16/3/93	16/3/94
AKSA	4/4/90	26/3/91	31/3/92	19/3/93	16/3/94
ALARKO HOL.	29/3/90	22/3/91	24/3/92	31/3/93	16/3/94
ALARKO SAN.			30/3/92	30/3/93	16/3/94
ALTINYILDIZ			27/3/92	31/3/93	29/3/94
ANADOLU CAM	13/3/90	6/3/91		15/3/93	4/3/94
ARCELIK	6/4/90	12/4/91	2/4/92	16/3/93	21/1/94
ASELSAN		1/4/91	30/3/92	25/2/93	8/3/94
ASLAN CIMENTO	30/3/90	28/3/91	26/3/92	30/3/93	31/3/94
AYGAZ	5/3/90	28/3/91	14/4/92	2/4/93	21/1/94
BANVIT				31/3/93	31/3/94
BAGFAS	22/3/90	4/4/91	26/3/92	1/4/93	24/3/94
BEKO				16/3/93	21/1/94
BIRLIK TUTUN			25/3/92	29/3/93	29/3/94
BOLU CIMENTO	30/3/90		25/3/92	19/3/93	11/3/94
BRISA	22/3/90	19/2/91	12/3/92	12/3/93	22/3/94
BURCELIK				26/2/93	11/3/94
CELIK HALAT	27/3/90	11/3/91	5/3/92	29/3/93	30/3/94
CESME ALTINYUNUS	9/4/90	22/3/91	7/4/92	5/4/93	30/3/94
CIMSA	29/3/90	12/3/91	26/3/92	17/3/93	28/3/94
CIMENTAS				5/3/93	11/2/94
CANAKKALE CIM.	3/4/90		9/4/92	5/4/93	18/3/94
CUKUROVA ELEKTRIK	2/4/90	1/4/91	20/4/92	18/5/93	4/5/94
DEMIRBANK		19/2/91	14/2/92	26/2/93	28/2/94
DENIZLI CAM	9/4/90	1/4/91		21/4/93	8/4/94
DERIMOD		28/5/91	20/4/92	20/4/93	11/3/94
DEVA HOL.	20/3/90	21/3/91	13/3/92	31/3/93	21/1/94
DISBANK		4/3/91	10/2/92	19/2/93	7/2/94
DITAS DOGAN		1/5/91	1/5/92	22/4/93	21/4/94
DOGUSAN		11/4/91	18/6/92	24/5/93	25/4/94
DOKTAS	16/3/90	27/3/91	25/2/92	16/3/93	21/1/94
DURAN OFSET			20/4/92	21/4/93	21/4/94
ECZACI ILAC		10/4/91	25/3/92	19/3/93	31/3/94
ECZACI YAT.	16/4/90	13/3/91	12/3/92	5/3/93	8/3/94
EDIP IPLIK				27/4/93	12/4/94
EGE BIRA	10/4/90	24/4/91	15/4/92	14/4/93	7/4/94
EGE ENDUSTRI	2/4/90	27/3/91	27/3/92	19/3/93	21/3/94
EGE GUBRE		24/4/91	17/4/92	5/4/93	10/3/94
EGE SERAMIK				25/2/93	7/3/94
EMEK SIGORTA			31/3/92	31/3/93	24/3/94
ENKA	26/3/90		31/3/92	29/3/93	30/3/94
ERCIYAS BIRA	9/4/90	12/4/91	17/4/92	15/4/93	8/4/94
ERDEMIR	29/3/90	4/3/91	26/3/92	30/3/93	28/4/94
ESBANK		27/5/91	31/1/92	25/1/93	25/1/94
FENIS		27/3/91	27/3/92	5/4/93	27/4/94
FINANSBANK	26/2/90	30/1/91	21/2/92	23/2/93	2/3/94
GARANTI BANKASI		13/2/91	6/2/92	3/3/93	11/3/94
GENTAS	13/3/90	29/4/91	20/4/92	6/2/93	16/4/94
GIMA			27/4/92	30/3/93	1/4/94
GLOBAL YAT.				26/1/93	27/1/94
GORBON ISIL	24/1/90	29/4/91	17/4/92	20/4/93	31/5/94
GOOD YEAR	29/3/90	27/3/91	24/3/92	30/3/93	25/2/94
GUBRE FAB.	30/3/90	1/3/91	31/3/92	19/3/93	17/3/94
GUNEY BIRA	6/4/90	29/4/91	20/4/92	16/4/93	14/4/94
HEKTAS	30/3/90	7/3/91	27/2/92	22/2/93	25/2/94
HURRIYET			27/3/92	15/3/93	17/3/94
IKTISAT FINANS	6/3/90	21/1/91	17/4/92	15/3/93	23/3/94
INTEMA	9/3/90	18/3/91	12/3/92	3/2/93	4/3/94
IMP			6/3/92	17/3/93	10/2/94
IZDEMIR	7/5/90		20/4/92	3/5/93	20/3/94
IZOCAM	28/3/90	11/3/91	2/3/92	10/3/93	21/1/94
KARTONSAN	12/2/90	22/2/91	25/3/92	19/3/93	11/2/94

KAV	28/2/90	6/3/91	16/3/92	16/2/93	21/1/94
KOC HOL.	20/3/90	22/2/91	21/2/92	18/2/93	17/2/94
KOC YAT.	22/2/90	18/2/91	24/1/92	26/1/93	21/1/94
KEPEZ ELEKTRİK		27/3/91	10/2/92	3/5/93	28/4/94
KELEBEK MOBİLYA		18/2/91	28/2/92	31/3/93	30/3/94
KENT GIDA		14/3/91	31/3/92	15/3/93	11/3/94
KONYA CIMENTO		12/3/91	19/3/92	18/3/93	17/3/94
KORDSA	19/3/90	19/2/91	19/3/92	16/3/93	14/2/94
KOYTAS	7/5/90	8/3/91	20/2/92	16/3/93	17/4/94
KUTAHYA PORSELEN		15/3/91	30/3/92	3/3/93	21/3/94
LUKS KADİFE		12/4/91	23/3/92	15/3/93	25/2/94
MARMARIS ALTINYUNUS			7/4/92		21/1/94
MAKİNA TAKİM	17/4/90	22/5/91	2/6/92	26/4/93	2/5/94
MARET	3/4/90	11/4/91	8/4/92	2/4/93	21/1/94
MEDYA HOL.				11/6/93	12/5/94
METAS	26/3/90		21/4/92	19/3/93	22/4/94
MİGROS		12/4/91	15/4/92	5/4/93	21/1/94
MARMARIS MARTİ	6/4/90	5/4/91	9/4/92	28/4/93	13/4/94
MARDİN CIMENTO	30/3/90		27/3/92	16/3/93	22/3/94
MARSHALL		25/2/91	20/3/92	1/4/93	31/3/94
NETAS				16/3/93	9/3/94
NİGDE CIMENTO			27/3/92	16/3/93	30/3/94
NET HOL.	11/4/90	28/3/91	23/4/92	1/4/93	12/4/94
NET TURİZM	27/3/90	8/3/91	9/4/92	5/4/93	26/4/94
OKAN TEKSTİL	6/2/90	1/4/91	29/4/92	19/3/93	7/4/94
OLMUĞSA	29/3/90	22/3/91	26/3/92	8/3/93	31/3/94
OTOSAN	27/3/90	9/4/91	8/4/92	31/3/93	14/4/94
PARSAN			26/3/92	30/3/93	15/4/94
PEG PROFİLO	28/3/90	21/3/91	27/3/92	15/3/93	16/3/94
PETKİM		21/3/91	1/4/92	18/3/93	11/4/94
PİMAS	27/3/90		31/3/92	31/3/93	1/3/94
PİNAR SU	26/3/90	2/4/91	27/3/92	17/3/93	23/3/94
PETROKENT			27/3/92	12/3/93	18/2/94
PİNAR ET			7/4/92	15/4/93	23/3/94
PİNAR UN	12/3/90	20/3/91	19/3/92	17/3/93	23/3/94
PİNAR SUT	6/4/90	10/4/91	8/4/92	15/4/93	23/3/94
POLYLEN	27/3/90	7/3/91	18/5/92	8/4/93	28/4/94
PETROL OFİSİ			31/3/92	16/3/93	19/4/94
SABAH YAYINCILIK			16/3/92	23/2/93	10/3/94
SARKUYSAN	20/3/90	5/3/91	9/3/92	3/3/93	18/2/94
SİFAS	27/3/90	7/3/91	18/5/92	8/4/93	28/4/94
SİSE CAM	26/3/90	18/3/91	24/3/92	19/3/93	25/3/94
SOKSA	30/4/90			5/4/93	2/5/94
SIEMENS	21/2/90			2/2/93	3/1/94
SONMEZ FILAMENT			30/3/92	30/3/93	29/3/94
SUN ELEKTRONİK		25/2/91	20/2/92	15/2/93	3/5/94
TUBORG	4/4/90	8/4/91	25/3/92	29/3/93	23/3/94
TEKSTİLBANK		1/3/91	24/3/92	15/2/93	26/1/94
TELETAS	4/4/90	11/4/91	17/4/92	16/3/93	21/4/94
TRANSTURK HOL.				31/3/93	11/3/94
THY		28/3/91	27/4/92	28/4/93	11/4/94
TİRE KUTSAN		28/5/91	30/3/92	16/3/93	4/4/94
T. KALKINMA BANKASI			23/6/92	6/4/93	
TOFAS FAB.			21/4/92	27/4/93	7/4/94
TOFAS OTO TİCARET			24/3/92	16/3/93	6/4/94
TRAKYA CAM		13/3/91	5/3/92	17/3/93	9/3/94
TSKB	28/3/90	20/2/91	20/3/92	29/3/93	29/3/94
T. DEMİRDOKUM	17/4/90	27/3/91	7/4/92	2/4/93	21/1/94
TUPRAS			30/3/92	30/3/93	16/3/94
TURCAS				5/3/93	22/2/94
TUTUNBANK		18/2/91	17/2/92	1/3/93	24/2/94
UNYE CIMENTO		18/2/91	30/3/92	15/3/93	21/2/94
USAĞ SERAMİK		18/3/91	27/4/92	17/5/93	30/4/94
VAKİF YAT.			26/3/92	5/3/93	7/2/94
VAKİF LEASİNG		12/4/91	20/3/92	16/3/93	17/3/94
VESTEL			27/3/92	17/3/93	20/4/94
YASAS	15/3/90		17/4/92	16/3/93	23/3/94
YKB	29/3/90	15/2/91	19/2/92	11/3/93	30/3/94
YUNSA	4/3/90	22/3/91		17/3/93	16/3/94

TABLE 2
DIVIDEND AMOUNTS (%)

	1990	1991	1992	1993	1994
ADANA A		268.9	119.4	120.4	143.4
ADANA C		26.54	11.76	11.8	14.16
AFYON		223.7	76.67		54.38
AKAL	14	23	15	51	62
AKBANK	72	63	26	30	50
AKCIMENTO	6.6	25	30	50	75
AKSA	55	61	65	115	90
ALARKO HOL	25	40	60	15	30
ALARKO SAN			40	70	215
TELETAS	55	27	75	15	0
ALTINYILDIZ		33.9	24	18	72
CESME	30	0	0	0	0
ANADOLU CAM	29	26	0	15	25
ARCELIK	100	165	143.6	77	100
ASELSAN	1.39	11.87	25	50	60
ASLAN CIM	25	58.5	21.58	33.35	26.25
AYGAZ	26.5	62	60	63	32.5
BAGFAS	40	50	15	30	60
BEKO			125	75	75
BIRLIK TUTUN		6.1	6.4	0	0
BOLU CIM	37	56.8	41.7	28	13.25
BRISA	44	12	6	32.5	62
BURCELIK			50	40	50
BURSA CIM	150	350	150	80	150
CANAKKALE			1.5	10	21.5
CELIK HALAT	70	60	20	40	30
CIMENTAS			100	123.4	180.5
CIMSA	44	20	32	85.5	220
CUKUROVA	250	120	80	100	120
DEMIRBANK		50	40	37	84
DENIZLI CAM	20	5.5	0	0	100
DERIMOD		129.7	0	0	12
DEVA	60	60	40	0	50
DITAS		10	5	100	150
DOGUSAN	20	4.1	10.8	0	4
DOKTAS	27	70	56	67	90
DURAN OFFSET		30	3.2	0	0
ECZ. ILAC	100	100	75	25	20
ECZ. YAT.	45	50	50	30	25
EDIP IPLIK		6	2	23	0
EGE BIRA	80	130	500	100	100
EGE ENDUSTRI	135.7	50	24	50	100
EGE GUBRE	0	0	0	5	50
EGE SERAMIK				81.7	69
EMEK SIGORTA	3.77	2.83	5.08	6.58	20
ENKA HOL.	50	40	50	70	50
ERCIYES BIRA	12	35	100	60	60
ERDEMIR	50	30	40	40	9
ESBANK		34.5	17.6	15.4	20.05
FINANSBANK	255	100	84	80	105
GENTAS	52	52	23	11	192
GIMA		0	4.5	0	0
GLOBAL YAT.			0	40.4	93
GOODYEAR	15	0	25	60	120
GUBRE FAB.	0	0	0	1	20
GUNEY BIRA	35	75	240	40	55
HEKTAS	60.8	71	19.15	20.25	16.85
HURRIYET			24.5	15.25	22.1
IKTISAT LEAS.	1.73	21.95	25	34.5	102
INTEMA	45	20	40	10	18
IMP	3	40	42	7	95
IZDEMIR	0	0	0	0	6.5
IZOCAM	85	82.5	87.5	75	75
KARTONSAN	30	35	20	30	62.5

KAV	75	64	12	0	0
KELEBEK	70	85	50	30	150
KENT GIDA	55.4	30	25	25	69
KEPEZ	100	37.5	25	47.4	100
KOC HOLDING	110	32.6	53.5	35	75
KOC YAT.	60	60	100	100	110
KONYA CIM	48	200	260	562	950
KORDSA	45	21	25	20	21.5
KOYTAS	20	20	10	1.5	35
KUTAHYA	50	50	10	80	40
LUKS KADIFE		38.8	20	23	100
MAKINA TAKIM	100	17	0	0	0
MARDIN CIM.	188	628.4	207.2	236.2	273
MARET	0	5	10	0	24
MARMARIS ALT.	0	0	0	0	0
MARMARIS MART	10	10	19.8	15	10
MARSHALL	60	83	42	61	55
MEDYA HOL			6.8	6.75	6.16
METAS	0	0	0	0	0
MIGROS		16	37.5	100	210
NET HOL	25	12	0	1.13	40
NET TURIZM	150	70	0	20	110
NETAS				86.2	115.5
OKAN TEKSTIL	6	2	0	1.65	0
OLMUksA	16	0	4	10	0
PARSAN	0	0	0	0	0
PEG PROFILO	20	20	20	15	20
PETKIM	30.7	12	0	0	0
PETROKENT		33.3	12.83	0	1.67
PETROL OFISI		80.75	61.3	86.3	211.34
PINAR SU	5	5.75	0	0	27
PINAR SUT	53.6	7.5	9.74	27	136
PINAR UN	11.5	0	0	20	56
PIMAS	0.24	7	0	0	15
POLYLEN	25	60	0	0	0
SABAH	19	21.9	17	24.25	29.5
SARKUYSAN	150	200	70	100	100
SIFAS	100	100	0	0	0
SOKSA	100	12	0	0	0
SONMEZ FIL.		200.8	55.84	18	110.25
DEMIRDOKUM	30	50	65	80	90
DISBANK	30	0	41	62.5	104
GARANTI	8.4	52.35	55.78	64.54	82.35
KALKINMA BANK.		60	72.5	75.6	0
TSKB	12	13	33	25	50
SIEMENS	90	50	75	60	65
SISE CAM	15	20	10	11	10
TUBORG	0	0	0	30	40
TUTUNBANK	30	25	70	28	47.65
TAT KONSERVE				30	90
TEKSTILBANK	54.7	49.9	22.9	14	60.5
TIRE KUTSAN		20	0	30	50
TOFAS OTO		94	114	200	300
TOFAS FAB.		85.4	26	80	300
TRAKYA CAM	26	24	8.7	28	40
TRANSTURK			8	10	10
TURCAS PETROL			44.2	39	44
TUPRAS		10	31	34.36	23.86
THY	0	0	0	0	0
USAK SERAMIK	0	9	10	0	15.44
UNYE CIM.	33.4	44.25	38	97.16	107.44
VAKIF LEAS.		26.67	40	35	50
VAKIF YAT.		0	12.2	10	40
VESTEL	0	40	15	2.5	3
YKB	69.8	75.94	54.12	40	55
YASAS	23.82	17.66	13	25	50
YUNSA	25	25	0	15	50

TABLE 3

	1990	1991	1992	1993	1994
FIRMS WITH DIV. DECREASE	60%	39%	51%	36%	12%
FIRMS WITH DIV. INCREASE	23%	39%	35%	44%	68%
FIRMS WITH CONSTANT DIV.	17%	22%	14%	20%	20%

TABLE 3A

FIRMS WITH DIVIDEND DECREASE
(+) RETURN (-) RETURN

1990	38%	62%
1991	70%	30%
1992	48%	52%
1993	36%	64%
1994	36%	64%

TABLE 3B

FIRMS WITH DIVIDEND INCREASE
(+) RETURN (-) RETURN

1990	63%	38%
1991	39%	61%
1992	41%	59%
1993	46%	54%
1994	47%	53%

TABLE 3C

FIRMS WITH CONSTANT DIVIDEND
(+) RETURN (-) RETURN

1990	67%	33%
1991	31%	69%
1992	67%	33%
1993	64%	36%
1994	65%	35%

TABLE 4B
PERCENTAGE OF THE FIRMS WITH DIVIDEND DECREAS
ACCORDING TO DIVIDEND DECREASE AMOUNTS

	1990	1991	1992	1993	1994
0-10%	24%	22%	21%	39%	35%
10-20%	29%	28%	24%	30%	30%
20-30%	19%	17%	20%	5%	15%
>30%	24%	33%	35%	27%	20%

TABLE 4B
PERCENTAGE OF THE FIRMS WITH DIVIDEND INCREASE
ACCORDING TO DIVIDEND INCREASE AMOUNTS

	1990	1991	1992	1993	1994
0-10%	38%	28%	39%	24%	14%
10-20%	25%	19%	21%	20%	24%
20-30%	13%	11%	21%	29%	15%
>30%	25%	42%	18%	27%	47%

TABLE 5A
FIRMS WITH DIVIDEND DECREASE
AR TABLE

DAY	1990	1991	1992	1993	1994
-10	-0.0023	0.0076	-0.0019	0.0000	-0.0045
-9	0.0063	0.0005	-0.0001	0.0017	0.0071
-8	0.0008	0.0017	0.0012	0.0083	-0.0004
-7	0.0052	-0.0024	0.0016	-0.0100	-0.0080
-6	0.0028	-0.0072	0.0085	0.0027	0.0105
-5	0.0061	-0.0035	0.0025	0.0009	-0.0080
-4	-0.0071	0.0009	-0.0021	0.0016	-0.0033
-3	0.0049	0.0021	-0.0004	-0.0028	-0.0117
-2	-0.0004	0.0047	-0.0004	-0.0014	-0.0060
-1	0.0021	0.0150	0.0018	-0.0086	-0.0050
0	-0.0053	-0.0044	0.0002	-0.0001	-0.0087
1	0.0122	-0.0058	-0.0013	-0.0008	0.0026
2	-0.0051	-0.0053	0.0021	0.0025	-0.0013
3	-0.0040	-0.0004	-0.0020	0.0025	0.0030
4	0.0023	0.0001	-0.0005	0.0009	0.0061
5	0.0037	0.0060	-0.0045	0.0041	-0.0122
6	-0.0010	-0.0005	0.0021	-0.0035	-0.0030
7	0.0026	-0.0443	-0.0013	0.0026	-0.0043
8	0.0089	-0.0007	-0.0024	0.0030	-0.0061
9	0.0034	-0.0035	-0.0018	0.0009	-0.0111
10	0.0004	-0.0045	0.0039	0.0060	-0.0016

TABLE 5B
FIRMS WITH DIVIDEND INCREASE
AR TABLE

DAY	1990	1991	1992	1993	1994
-10	0.0008	-0.0020	0.0011	0.0032	-0.0014
-9	0.0031	-0.0002	-0.0008	0.0013	-0.0046
-8	-0.0014	0.0002	0.0020	0.0019	-0.0012
-7	0.0118	0.0050	-0.0009	0.0046	-0.0078
-6	-0.0099	0.0032	-0.0019	0.0001	0.0022
-5	0.0038	-0.0014	0.0016	0.0046	0.0019
-4	0.0001	-0.0027	0.0023	-0.0003	-0.0064
-3	-0.0040	0.0058	0.0004	0.0008	-0.0018
-2	-0.0105	0.0057	0.0008	-0.0007	-0.0031
-1	-0.0003	-0.0017	0.0028	0.0026	-0.0036
0	0.0005	-0.0032	0.0039	-0.0015	-0.0022
1	-0.0030	-0.0057	0.0016	-0.0003	-0.0067
2	-0.0037	0.0076	-0.0027	-0.0015	0.0034
3	-0.0031	0.0007	-0.0048	-0.0037	-0.0007
4	-0.0016	0.0010	-0.0016	0.0033	-0.0028
5	0.0033	-0.0026	-0.0005	-0.0019	-0.0020
6	0.0038	-0.0009	0.0019	-0.0010	-0.0043
7	-0.0054	0.0012	-0.0048	0.0018	0.0007
8	-0.0053	0.0030	-0.0008	0.0017	0.0008
9	0.0013	0.0007	0.0022	0.0080	-0.0018
10	-0.0091	0.0003	-0.0032	-0.0008	-0.0013

TABLE 5C
FIRMS WITH CONSTANT DIVIDEND
AR TABLE

DAY	1990	1991	1992	1993	1994
-10	-0.0039	-0.0014	0.0022	-0.0029	0.0052
-9	0.0037	-0.0674	0.0020	-0.0051	0.0007
-8	0.0023	-0.0040	0.0022	0.0101	-0.0087
-7	-0.0028	-0.0015	-0.0017	0.0065	-0.0071
-6	0.0036	0.0009	0.0075	-0.0008	0.0007
-5	-0.0030	0.0015	-0.0016	0.0070	-0.0137
-4	-0.0091	0.0037	-0.0001	-0.0122	0.0010
-3	0.0090	0.0028	-0.0054	0.0066	-0.0060
-2	-0.0093	-0.0020	-0.0008	0.0037	-0.0044
-1	-0.0025	-0.0010	0.0046	0.0028	0.0036
0	0.0034	-0.0001	-0.0012	0.0085	0.0049
1	0.0058	-0.0001	-0.0101	-0.0047	0.0008
2	0.0093	-0.0038	-0.0047	0.0080	-0.0033
3	-0.0034	-0.0115	0.0062	0.0075	-0.0077
4	-0.0095	0.0111	0.0015	0.0091	-0.0011
5	-0.0047	-0.0080	-0.0118	0.0078	-0.0110
6	0.0061	0.0013	0.0139	0.0054	-0.0039
7	-0.0111	-0.0034	-0.0103	0.0029	-0.0029
8	-0.0140	-0.0027	0.0003	0.0012	-0.0002
9	0.0106	-0.0163	0.0093	0.0012	-0.0085
10	-0.0002	0.0079	-0.0057	0.0038	-0.0123

TABLE 6A
FIRMS WITH DIVIDEND DECREASE
T-RATIO

DAY	1990	1991	1992	1993	1994
-10	-0.6418	1.6867	-1.2372	0.0068	-0.8439
-9	2.0315	0.1142	-0.0658	0.4884	1.2126
-8	0.3086	0.4170	0.6812	1.3821	-0.0676
-7	1.2462	-0.8285	0.9419	-2.4443	-1.2811
-6	0.8483	-2.3238	0.8259	0.8811	1.9281
-5	1.8777	-1.1269	0.9797	0.2716	-1.8057
-4	-2.0446	0.1770	-1.3451	0.4613	-0.3643
-3	1.1412	0.5810	-0.1401	-0.6670	-2.0218
-2	-0.1250	1.0572	-0.1786	-0.4186	-0.8738
-1	0.7926	2.9813	1.0045	-2.6267	-0.8857
0	-1.5486	-1.3374	0.0970	-0.0569	-1.5931
1	1.3519	-1.6385	-0.4752	-0.2978	0.4275
2	-1.2153	-1.4298	0.8586	0.8586	-0.3062
3	-1.0344	-0.0879	-0.6825	0.7572	0.4776
4	0.5967	0.0283	-0.2525	0.4139	0.7599
5	0.9037	1.1549	-2.2571	1.6801	-2.2720
6	-0.3550	-0.1987	0.8589	-1.1830	-0.5443
7	0.5736	-0.9719	-0.5008	1.0739	-0.4938
8	1.9881	-0.2507	-1.0457	1.1881	-0.8740
9	1.0223	-0.9193	-0.8380	0.3958	-1.2833
10	0.1178	-1.5034	1.7666	1.9738	-0.2760

TABLE 6B
FIRMS WITH DIVIDEND INCREASE
T-RATIO

DAY	1990	1991	1992	1993	1994
-10	0.1181	-0.5941	0.4903	1.3682	-0.5553
-9	0.4036	-0.0830	-0.3221	0.5522	-1.7307
-8	-0.1909	0.0585	0.7696	0.8269	-0.4476
-7	3.1340	1.8159	-0.5920	1.9190	-2.3796
-6	-1.3063	1.1194	-1.0418	0.0555	0.8115
-5	0.7929	-0.5301	0.7772	1.8626	0.6097
-4	0.0138	-1.3688	1.0099	-0.1259	-1.9823
-3	-0.6169	2.1599	0.1590	0.3412	-0.6614
-2	-2.9526	1.6876	0.3235	-0.3033	-1.1896
-1	-0.0515	-0.9772	1.0956	1.0204	-1.3214
0	0.0743	-0.9695	1.2307	-0.7948	-0.7294
1	-0.5164	-1.4861	0.6025	-0.1306	-2.3810
2	-0.7029	2.5338	-0.9705	-0.5860	1.4130
3	-0.6117	0.2210	-1.8342	-1.0579	-0.2557
4	-0.3766	0.2851	-0.5334	1.2799	-1.1956
5	0.5289	-0.8717	-0.1856	-0.7173	-0.6593
6	0.6487	-0.3448	0.8289	-0.4487	-1.5857
7	-1.1234	0.3826	-1.7135	0.8424	0.2389
8	-0.7634	1.0105	-0.3350	0.7626	0.3145
9	0.2903	0.3505	0.8477	3.2332	-0.6901
10	-1.6502	0.1149	-1.2537	-0.2899	-0.5054

TABLE 6C
FIRMS WITH CONSTANT DIVIDEND
T-RATIO

DAY	1990	1991	1992	1993	1994
-10	-0.4560	-0.1838	0.6171	-0.7528	1.0624
-9	0.3046	-0.8585	0.4109	-1.3184	0.1576
-8	0.2070	-0.5032	0.3401	2.5232	-1.5708
-7	-0.5011	-0.2338	-0.7121	1.2197	-1.8055
-6	0.2066	0.1709	2.1873	-0.1488	0.1165
-5	-0.3069	0.3649	-0.3994	1.9776	-2.7177
-4	-1.4062	1.2264	-0.0316	-2.4857	0.1946
-3	1.5127	0.4933	-0.8655	1.6165	-0.9788
-2	-2.0273	-0.3282	-0.2369	0.8593	-0.8157
-1	-0.2890	-0.3261	1.7658	0.6582	0.7662
0	0.3910	-0.0255	-0.3555	2.6356	0.9199
1	0.6193	-0.0110	-1.3084	-1.1555	0.2353
2	0.5985	-0.4806	-0.9350	1.4698	-0.5514
3	-0.5414	-0.9812	0.5201	1.7989	-1.4265
4	-1.0226	1.7031	0.2876	2.0537	-0.1921
5	-0.7382	-1.3428	-2.1523	1.5408	-2.2228
6	0.7395	0.2515	1.7733	1.1659	-0.6857
7	-2.4136	-0.3576	-2.0536	0.8010	-0.5969
8	-1.5139	-0.2805	0.0644	0.2361	-0.0392
9	1.6864	-3.3921	3.2214	0.2238	-1.9102
10	-0.0299	1.0406	-0.9650	1.0076	-2.0982

TABLE 7A		
FIRMS WITH DIVIDEND DECREASE		
	[-1,0]	T-STATISTICS
1990	-0.0032	-0.6412
1991	0.0106	1.7975
1992	0.0020	0.6704
1993	-0.0087	-2.1976
1994	-0.0137	-1.5337

TABLE 7B		
FIRMS WITH DIVIDEND INCREASE		
	[-1,0]	T-STATISTICS
1990	0.0002	0.0231
1991	-0.0049	-1.1960
1992	0.0066	1.3064
1993	0.0011	0.4093
1994	-0.0058	-1.3309

TABLE 7C		
FIRMS WITH CONSTANT DIVIDEND		
	[-1,0]	T-STATISTICS
1990	0.0009	0.0925
1991	-0.0012	-0.2069
1992	0.0034	0.8154
1993	0.0114	2.1687
1994	0.0085	1.0310

TABLE 8A		
FIRMS WITH DIVIDEND DECREASE		
	[-1,0]	T-STATISTICS
1990-1993	0.0008	0.1851
1994	-0.0137	-1.5337

TABLE 8B		
FIRMS WITH DIVIDEND INCREASE		
	[-1,0]	T-STATISTICS
1990-1993	0.0047	1.2732
1994	-0.0058	-1.3309

TABLE 8C		
FIRMS WITH CONSTANT DIVIDEND		
	[-1,0]	T-STATISTICS
1990-1993	0.0145	5.2982
1994	0.0085	1.0310

TABLE 9A
FIRMS WITH DIVIDEND DECREASE
CAR TABLE

	[-10,0]	[-4,0]	[-2,0]	[-1,0]	[0,2]	[0,4]	[0,10]
1990	0.0132	-0.0058	-0.0036	-0.0032	0.0019	0.0001	0.0182
1991	0.0151	0.0184	0.0154	0.0106	-0.0155	-0.0158	-0.0633
1992	0.0108	-0.0009	0.0016	0.0020	0.0010	-0.0015	-0.0056
1993	-0.0076	-0.0113	-0.0101	-0.0087	0.0016	0.0049	0.0180
1994	-0.0380	-0.0347	-0.0197	-0.0137	-0.0074	0.0017	-0.0367

TABLE 9B
FIRMS WITH DIVIDEND INCREASE
CAR TABLE

	[-10,0]	[-4,0]	[-2,0]	[-1,0]	[0,2]	[0,4]	[0,10]
1990	-0.006	-0.014	-0.010	0.000	-0.006	-0.011	-0.022
1991	0.009	0.004	0.001	-0.005	-0.001	0.000	0.002
1992	0.011	0.010	0.007	0.007	0.003	-0.004	-0.009
1993	0.017	0.001	0.000	0.001	-0.003	-0.004	0.004
1994	-0.028	-0.017	-0.009	-0.006	-0.006	-0.009	-0.017

TABLE 9C
FIRMS WITH CONSTANT DIVIDEND
CAR TABLE

	[-10,0]	[-4,0]	[-2,0]	[-1,0]	[0,2]	[0,4]	[0,10]
1990	-0.0086	-0.0084	-0.0083	0.0009	0.0184	0.0055	-0.0078
1991	-0.0686	0.0033	-0.0032	-0.0012	-0.0040	-0.0044	-0.0256
1992	0.0076	-0.0029	0.0026	0.0034	-0.0160	-0.0083	-0.0127
1993	0.0243	0.0095	0.0151	0.0114	0.0118	0.0284	0.0506
1994	-0.0238	-0.0008	0.0041	0.0085	0.0023	-0.0065	-0.0453